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The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/540,011
Filing Date: June 22, 2005
Appellant(s): BALTES ET AL.

Herbert Baltès et. al.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 6/2/2009 appealing from the Office action mailed 2/10/2009.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,311,910

HASEGAWA

5-1994

JP 3092679A

MASANOBU

4-1991

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

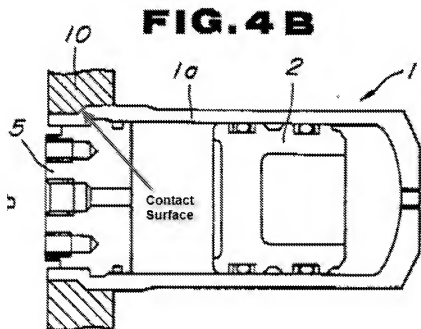
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11-12, 14-16, and 24-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Hasegawa (US 5,311,910).

In regards to **Claim 11**, Hasegawa discloses a method for producing a piston accumulator, comprising the steps of: mounting a piston 2 in an accumulator housing 1a for movement along a longitudinal axis of the housing with the piston 2 separating an interior of the housing 1a into two working chambers S1, S2 between first and second longitudinal ends of the housing 1a (Col. 2, lines 35-43); providing at least a first shoulder 1b in the interior of the housing 1a adjacent to but spaced from the first longitudinal end of the housing (Fig. 3; Col. 3, lines 40-46); inserting a first cover component 5 at least partially within the housing 1a through the first longitudinal end when open until an inner surface portion 5c of the first cover component 5 engages the first shoulder 1b preventing further insertion of the first cover component (Fig. 3; Col. 3, lines 40-46); deforming a first end portion of the housing 1a between the first shoulder 1b and the first longitudinal end at an acute angle relative to the longitudinal axis (See Fig. 4 where forming tool 10 deforms an acute angle into housing 1a) against an axial

outer circumferential contact surface extending at a corresponding acute angle relative to the longitudinal axis (contact surface is the acute angle portion on the forming tool 10 which deforms housing 1a (See Fig. 4B on the next page where the contact surface is labeled); note that forming tool 10 is composed of multiple pieces and thus this contact surface can be considered an outer axial surface; Fig. 4) and about an axial outer surface portion of the first cover component 5 to secure the first cover component 5 in the housing 1a with the first cover component 5 sealing the first longitudinal end of the housing 1a closed (Fig. 4 and 5; Col. 3, lines 47-68); and sealing the second longitudinal end of the housing closed (Fig. 1; second cover component 9 seals the second longitudinal end of the housing).



In regards to **Claim 12**, Hasegawa discloses that the first longitudinal end has an end edge deformed to be substantially flush with the outer surface portion (Fig. 5).

In regards to **Claim 14**, see Fig. 3 where the cover component tapers outward at 5c along the contact surface (i.e. along where the contact surface of the forming tool 10 will be pressed against the housing).

In regards to **Claim 15**, Hasegawa discloses axially forcing a shaping tool 10 against the longitudinal end to deform the first end portion (Fig. 4a, b). Note the acute angle bevel of shaping tool 10 in Fig. 4b.

In regards to **Claim 16**, see Fig. 3 where 1b is a transition point between different wall thicknesses (one being a reduced thickness relative to the other adjacent portion) forming the first shoulder.

In regards to **Claim 24**, portion 1b of housing 1a has an inner circumference and is at a free end edge of the first longitudinal end and acts as an insertion bevel widening toward an exterior of the housing to guide the first cover component into the housing (Fig. 3).

In regards to **Claim 25**, the cover component 5 has a height at least twice a height of a deformed section 5a (Fig. 5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-22 and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa (US 5,311,910).

In regards to **Claim 17**, Hasegawa discloses an insertion bevel on an interior surface of the housing which tapers inwardly guiding the cover component (at 1b in Fig. 3). However, the aforementioned bevel does not taper from a free end edge of the longitudinal end. It would be obvious to one of ordinary skill in the art to position the insertion bevel at a free end edge of the longitudinal end for the purpose of ensuring that the cover component will be positioned properly when it is being inserted into the housing and also since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

In regards to **Claims 18-20, 26 and 30**, Hasegawa discloses that the second end of the housing is sealed by a second cover component 56. All of the limitations in claims 18-20, 26 and 30 for the second cover component are identical to those of the first cover component already discussed. It would be obvious to one of ordinary skill in the art to modify the second cover component on the other end of the housing to have the identical features and installation and deformation procedures as the first cover component for the purpose of optimizing the seal on the other end of the housing and also since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

In regards to **Claims 21-22**, it would be obvious to one of ordinary skill in the art to deform both end portions simultaneously for the purpose of saving manufacturing

time.

In regards to **Claims 27-28**, it would be obvious to one of ordinary skill in the art to deform the first end portion at an obtuse angle for the purpose of creating the desired geometric profile.

In regards to **Claim 29**, Hasegawa discloses that the deformed section 5a extends directly from the first longitudinal end 1a (Fig. 5).

Claims 13 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa (US 5,311,910) in view of Masanobu (JP 03092679A).

In regards to **Claim 13**, Hasegawa does not disclose that a projection extends axially from the outer surface portion of the first cover component. However, Masanobu teaches providing a projection 28 extending axially from the outer surface portion of a cover component 26 (Fig. 3). It would be obvious to one of ordinary skill in the art to incorporate such a projection in the cover component for the purpose of allowing connection to an associated oil chamber.

In regards to **Claim 23**, Hasegawa does not disclose inserting the first cover component by a feed bevel of a positioning tool enclosing an edge of the housing. However, Masanobu teaches inserting a cover component 6 by a feed bevel of a positioning tool 13 enclosing a free end edge of the first end portion of the housing 2 (Fig. 2c). It would be obvious to one of ordinary skill in the art to utilize a positioning tool while inserting a cover for the purpose of ensuring that the cover component will be positioned properly when it is being inserted into the housing.

(10) Response to Argument

Claim 11

Argument: Appellant argues on page 5 of the Appeal Brief that each of the axial outer circumferential contact surface and the axial outer surface portion are "of the first cover component", and thus, part of the first cover component. Since the axial outer circumferential contact surface is part of the first cover component, the deformation must be against that cover component. No other claim interpretation is reasonable. Also, this application only discloses the contact surface on the cover component, such that appellant's interpretation is the only one that is reasonable and supported by the application.

Response: The examiner disagrees with the assertion that each of the axial outer circumferential contact surface and the axial outer surface portion are "of the first cover component". The claim language only positively recites that the axial outer surface portion is "of the cover component".

In response to Appellant's argument that this application only discloses the contact surface on the cover component, such that appellant's interpretation is the only one that is reasonable and supported by the application, note that claims are rejected using their broadest reasonable interpretation and although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Argument: Appellant argues on page 6 that if the axial outer circumferential contact surface is not required to be part of the cover component, such contact surface

would then not be defined relative to and connected to other recited limitations, and would have been held to be indefinite under 35 U.S.C. § 112, second paragraph. No rejection under 35 U.S.C. §112, second paragraph, has been presented.

Response: Using the examiner's interpretation of the claims, where the contact surface is not "of the cover component", the contact surface is still defined relative to the other recited limitations since the contact surface still must extend at a corresponding acute angle relative to the longitudinal axis and about an axial outer surface portion of the first cover component.

Note the language of 35 U.S.C. § 112, second paragraph:

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

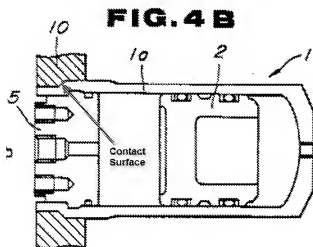
It is unclear why a rejection under 35 U.S.C. §112, second paragraph would be necessary if the contact surface is interpreted as separate from the cover component.

Argument: Appellant argues on page 6 that as clearly shown in Figs. 1-4b, the Hasegawa contact surface on the cover component is perpendicular to the longitudinal axis, not at an acute angle. Any Hasegawa angled surface on the tool will not satisfy claim 11, since that tool surface is not of the cover component, as recited in claim 11. Claim 11 is then patentably distinguishable over the Hasegawa patent by reciting that the deformation is against a cover component contact surface extending in an acute angle (i.e., an angle less than 90 degrees) relative to its longitudinal axis. As clearly

shown in Figs. 1-4b, the Hasegawa stepped contact surfaces are perpendicular to the longitudinal axis, and are not at an acute angle.

Response: It appears that the Appellant is referring to Fig. 5 where tool 12 presses perpendicularly to the longitudinal axis. However, the rejection applied to claim 11 relies on the contact surface being on the forming tool 10 (See Fig. 4B on the next page where the contact surface is labeled). This surface is extending at an acute angle relative to the longitudinal axis and about an axial outer surface portion of the first cover component 5.

In response to appellant's argument that the references fail to show certain features of appellant's invention, it is noted that the features upon which appellant relies (i.e., the deformation is against a cover component contact surface extending in an acute angle) are not recited in the rejected claim 11. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).



Claim 12

Argument: Appellant argues on page 7 that Claim 12 is further distinguishable by the end edge of the first longitudinal end being deformed to be substantially flush with the outer surface portion surrounded by an acutely angled contact surface. No such flush arrangement is disclosed in the Hasegawa patent. Fig. 5 is cited relative to this feature in the Advisory Action. However, Fig. 5 shows the housing free end axially spaced from the outer surface of its cover component 5.

Response: Note that the limitation states that the end edge is deformed to be *substantially* flush with the outer surface portion (See Fig. 5 where the end edge is substantially flush with the outer surface portion).

In response to appellant's argument that the references fail to show certain features of appellant's invention, it is noted that the features upon which appellant relies (i.e., the outer surface portion **surrounded by an acutely angled contact surface**) are not recited in the rejected claim 12. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim 14

Argument: Appellant argues on page 7 that Claim 14 is further distinguishable by the outer cover component tapering along the contact surface, which is an outer axial surface. No such tapering surface in the Hasegawa patent is axial and outer, as claimed. The Hasegawa surface 5c is not the contact surface and it tapers toward the inside, not toward the outside as claimed.

Response: Note that the claim does not recite a tapering surface, it recites that the first cover component *tapers* in an outward direction *along the contact surface*. The claim does not positively recite that the contact surface itself is tapering. Using the broadest reasonable interpretation the portion that tapers can be any part of the cover component as long as it tapers in an outward direction and is along the contact surface. The surface 5c relied on tapers and is along where the contact surface of the forming tool 10 will press against the housing. Regarding the outward direction, note that there is no context for this direction and note that the surface 5c tapers toward an outward direction of the forming tool 10.

Claim 15

Argument: Appellant argues on page 8 that the Hasegawa lateral staking member 10 is only disclosed to move radially and does not describe an axial force.

Response: Note that the acute angle in the middle of the forming tool 10 (i.e. the contact surface) will inherently result in an axial force against housing when the forming tool 10 is moved radially.

Claim 24

Argument: Appellant argues on page 8 that portion 1b is not at a free end edge of housing 1a, but is spaced within that housing.

Response: Using the broadest reasonable interpretation portion 1b can be considered to be at a free end edge of housing 1a since before the cover component is inserted, the portion 1b is free and is an end edge.

Claim 25

Argument: Appellant argues on page 9 that the Hasegawa patent does not show a cover component height at least twice the deformed section height, as claimed and that no relative dimensions are disclosed in the Hasegawa patent.

Response: Note that the cover component 5 clearly has a height at least twice a height of a deformed section 5a (Fig. 5). Although no dimensions are disclosed, it is clearly apparent that the cover component is at least twice the height of the deformed section 5a, since the section 5a is such a small portion compared to the cover component.

Claim 17

Argument: Appellant argues on page 10 that the examiner has used improper hindsight reasoning from the appellant's disclosure.

Response: In response to appellant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Claim 18

Argument: Appellant argues on pages 10-11 that the examiner has used improper hindsight reasoning from the appellant's disclosure.

Response: In response to appellant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Claim 19

Argument: Appellant argues on page 11 that none of the recited patents disclose a second shaping tool.

Response: Note that the instant invention only shows one shaping tool 42 in Fig. 2. Clearly the second shaping tool is identical since there is no drawing of a second tool. Also note that it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. In *re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Claim 26

Argument: Appellant argues on pages 11-12 that the Hasegawa patent does not show a cover component height at least twice the deformed section height, as claimed and that no relative dimensions are disclosed in the Hasegawa patent.

Response: Note that the cover component 5 clearly has a height at least twice a height of a deformed section 5a (Fig. 5). Although no dimensions are disclosed, it is clearly apparent that the cover component is at least twice the height of the deformed section 5a, since the section 5a is such a small portion compared to the cover component.

Claims 27 and 28

Argument: Appellant argues on page 12 that no evidence of record supports the allegation that it would be obvious for the deformed section to be deformed at an obtuse angle.

Response: Note that the acute angle pressed against the axial outer portion of the first end portion of the housing could be easily changed to an obtuse angle and would be an obvious matter of design choice. Further, note that there is no context in the claim as to what the angle is in relation to.

Claims 29 and 30

Argument: Appellant argues on pages 12-13 that the Hasegawa deformed sections are spaced from and do not extend directly from the longitudinal ends.

Response: It is unclear what the appellant means by the deformed sections being "spaced from" the longitudinal ends. Hasegawa clearly shows that the deformed

sections extend directly from the longitudinal ends 1a. The limitation "extending directly" is satisfied as long as the deformed portions are connected to the longitudinal ends which they clearly are.

Claim 13

Argument: Appellant argues on page 13 that no projection is disclosed by Hasegawa or Masanobu and that the Masanobu projection is not extending from an axial outer surface portion surrounded by an acutely angled contact surface.

Response: Note that the Masanobu projection 28 shown in Fig. 3 is identical to the projection of the instant invention shown in Fig. 7.

In response to appellant's argument that the references fail to show certain features of appellant's invention, it is noted that the features upon which appellant relies (i.e., an axial outer surface portion **surrounded by an acutely angled contact surface**) are not recited in the rejected claim 13. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim 23

Argument: Appellant argues on page 13 that the function of the Masanobu part 13 is not clear from the drawings or translation.

Response: Note that the part 13 meets all the limitations of the claims from the drawings alone where clearly the part 13 encloses a free end edge of the housing and it is in this position as the cover component is inserted into the housing (See Fig. 2).

Conclusion

In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/RYAN J. WALTERS/

Examiner, Art Unit 3726

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